# Chapter 2

# Performance of MGNREGA of West Bengal vis-a-vis other

### **States in India**

In 2006, the MGNREGA expanded rapidly, covering the country's entire rural segment. The coverages of MGNREGA districts increased from 200 to 632 during 2006-07 to 2012-13. At the end of the financial year 2015-16 it was 661. Only eleven districts were out of the coverage of MGNREGA. It provided employment to 48 million households - the equivalent of 28 percent of all rural households- in an average of 40-50 person days of employment per household for the financial year 2012-13. The programme lost its rythm and household employment decreased to 38.9 million in the year 2014-15 with the announcement to stop the programme from the Central government. But sound was raised by Kousik Basu, Dreze and others eminent economist against the government policy. After that government rethink on the issue and the household employment increased to 45.6 million.

Table A2 in the appendix describes the overall performance of MGNREGA in India. In 2009-10 number of person days created was 284 crores which declined to 257 crore person days in 2010-11. In the financial year 2012-13, MGNREGA generated 210.80 crore persondays. Employment creation was 176.46 crore persondays in 2015-16. The geographical coverage as well as coverage in various sections of rural disadvantaged increased over the years. In the first five year the main beneficiaries were rural SCs and STs with the share of SC and ST families in the work provided under MGNREGA ranged from 51 to 61 percent. In the financial year 2012-13, MGNREGA provided employment 83.54 crore person days and as a percentage share in total person days it was 38.2 percent which was quite lower than the previous years. The persondays

for SCs and STs families were 58.93 crore and 71.44 crore respectively for the year 2014-15 and 2015-16. The total availability of funds (including opening balance) was Rs.12073.55 crore and Rs. 41121.75 crore respectively for the FY 2006-07 and 2012-13 respectively. As against this, an amount of Rs. 8823.36 crore and Rs.29422.2 crore had been utilized which constituted 73.08 percent and 69 percent of the funds available for the financial year 2006-07 and 2012-13 respectively. The spending was Rs. 41449.91 crore as against Rs. 35616.15 crore i.e. the percentage of utilization was 116.38 percent in 2015-16. Finally if we consider all the numerical figure taking together for all the study year, it is observed that all the numerical figures show the highest plateau for the FY 2009-10.

The present chapter deals with the overall performance of MGNREGA in West Bengal vis a vis other states in India over time. Accordingly, we try to develop a comparative analysis at state level and for this purpose we take resort to the secondary data and secondary data have been be collected from MGNREGA's portal. Data have also been collected from the published reports of Ministry of Rural Development, Government of India.

The plan of this chapter is as follows. Employment generation under MGNREGA during 2006-07 to 2015-16 is analysed in Section 2.1. Section 2.2 deals with the utilisation of fund in MGNREGA in India and her states. Section 2.3 discusses about formation of productive assets. Section 2.4 examines the performance of MGNREGA over time and develops performance index to compare the overall performance among states of India. Section 2.5 makes the summing up of the chapter.

## 2.1 Employment Generation under MGNREGA during 2006-07 to

#### 2015-16

Registration of job card is the way to entitled into the programme. A job card is issued for a household with the name of possible worker who are willing to work under MGNREGA. The coverage of issuing job cards has been increased gradually. Among the major states of India, Chhattisgarh, Madhya Pradesh, Rajasthan, West Bengal were enrolled more than 50 percent of the household (NSSO, Employment Unemployment Survey, 2009-10). With 70.9 percent Rajasthan stood the first place where as all India data was 34.7 percent. Haryana provided job cards to 6.6 percent of rural household. The proportion was below 20 percent in Bihar, Jammu & Kashmir, Karnataka, Kerala, Maharashtra and Punjab. On the other hand proportion of ST households was 54.1 percent as against proportion of SC households 45.0 percent for all India level in 2009-10. That is the marginalized sections get the more job cards than the other sections (appendix Table A3).

### 2.1.1 Household Employment under MGNREGA

The percentage of households get job with issued job cards across states of India is shown in Table 2.1.1 and Figure 2.1.1.

Table 2.1.1 - Percentage of household get job with issued job card

				Change of % point	
				2007-08 to	2011-12 to
States	2007-08	2011-12	2015-16	2011-12	2015-16
Andhra Pradesh	54.3	41.2	40.7	-13.1	-0.5
Assam	89.6	34.4	33.7	-55.2	-0.7
Bihar	48.3	13.7	12.7	-34.6	-1.0
Chhattisgarh	79.5	62.2	63.6	-17.3	1.4
Gujarat	33.6	20.1	16.3	-13.5	-3.8

Haryana	43.9	41.3	23.4	-2.6	-17.9
Himachal Pradesh	68.9	45.2	37.6	-23.7	-7.6
Jammu & Kashmir	54.6	50.8	46.8	-3.8	-4.0
Jharkhand	56.8	38.8	31.9	-18.0	-6.9
Karnataka	36.1	29.6	26.3	-6.5	-3.3
Kerala	38.7	76.3	51.2	37.6	-25.1
Madhya Pradesh	60.1	31.5	36.9	-28.6	5.4
Maharashtra	15.2	20.9	16.3	5.7	-4.6
Odisha	26.8	22.4	30.1	-4.4	7.7
Punjab	50.8	28.3	42.0	-22.5	13.7
Rajasthan	75.6	46.5	45.6	-29.1	-0.9
Tamil Nadu	56.1	77.5	68.7	21.4	-8.8
Uttar Pradesh	56.0	50.2	34.3	-5.8	-15.9
Uttarakhand	52.8	44.8	48.5	-8.0	3.7
West Bengal	44.8	48.7	50.8	3.9	2.1
Mean	52.1	41.2	37.9	-10.9	-3.4
C. V.	34.2	42.0	39.6	_	_

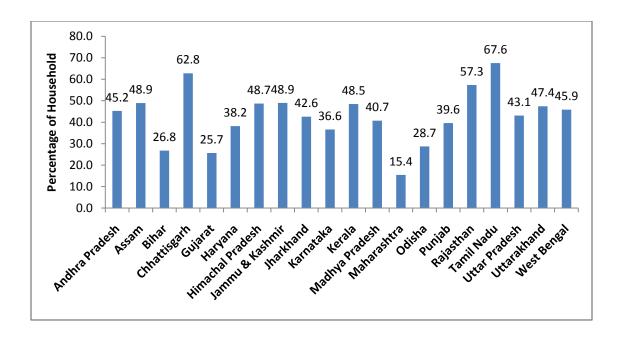
Source: www.nrega.nic.in

The percentage of households provided employment with issued job card varied between 15.2 percent and 89.6 in 2007-08 and between 12.7 percent and 68.7 percent in 2015-16. In 2007-08, Assam (89.6 percent), Chhattishgar (79.5 percent), Rajasthan (75.6 percent), Himachal Pradesh (68.9 percent) and Madhya Pradesh (60.1 percent) abled to provide job above 60 percent household with issued job card. The percentage of households employed in 2015-16 was highest in Tamil Nadu (68.7 percent), followed by Chhattishgar (63.6 percent) and Kerala (51.2 percent). Eight states were below 50 percent level out of twenty states in 2007-08 and the figure turned to 11 in 2015-16. The percentage of Bihar (12.7 percent), Maharastra (16.3 percent) and Gujrat

(16.3 percent) indicated the inability to provide employment to the people who demanded job under MGNREGA.

The percentage of employed household with isssued job card decreased over time in most of the states except Kerala, Maharastra, Tamil Nadu and West bengal during 2007-08 to 2011-12. After 2011-12 it is increased in Chhattishgar, Madhya Pradesh, Odissa, Punjab, Uttarakhand and West Bengal. The mean of percentage of the household get job with issued job card of twenty states decreased from 52.1 to 41.2 during 2007-08 to 2011-12 and further it decreased to 37.9 percent in 2015-16.

Figure 2.1.1: Average Percentage of household provided employment under MGNREGA in total job card holders during 2006-07 to 2015-16



 $Source: Author's \ calculation \ based \ on \ secondary \ data \ , \ www.nrega.nic.in$ 

The percentage of household got job in total job card holder in an average (2006-07 to 2015-16) under MGNREGA was very low in the states of Maharashtra (15.4 percent), Odisha (28.7)

percent), Gujarat (25.7 percent) and Bihar (26.8 percent). The states like Tamil Nadu (67.6 percent), Chhattisgarh (62.8 percent), Rajasthan (57.3 percent), Assam (48.9 percent) and Uttarakhand (47.4 percent) had relatively better coverage than all other regions. Maharastra (15.4 percent), Gujrat (25.7 percent) and Bihar (26.8 percent) shown a low rate of participation.

#### 2.1.2 Average Person days of Employment under MGNREGA Per household:

The average persondays of employment under MGNREGA per household and again percentage of household receiving at least 100 days job in states of India are presented in Table 2.1.2.a and Table 2.1.2.b respectively. The Figure 2.1.2 depicts state wise average persondays of employment per household and percentage of household receiving at least 100 days job in an average 2006-07 to 2015-16.

Table 2.1.2.a: State-wise Average Persondays of Employment per Household

				Annual Growth	
states	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16
Andhra Pradesh	42	56	47	0.08	-0.04
Assam	35	26	29	-0.06	0.03
Bihar	22	38	42	0.18	0.03
Chhattisgarh	58	44	37	-0.06	-0.04
Gujarat	31	38	35	0.06	-0.02
Haryana	50	39	28	-0.06	-0.07
Himachal Pradesh	36	52	40	0.11	-0.06
Jammu & Kashmir	24	45	36	0.22	-0.05
Jharkhand	45	39	45	-0.03	0.04
Karnataka	36	42	42	0.04	0.00

Kerala	33	45	42	0.09	-0.02
Madhya Pradesh	63	42	42	-0.08	0.00
Maharashtra	39	47	52	0.05	0.03
Odisha	37	33	37	-0.03	0.03
Punjab	39	26	26	-0.08	0.00
Rajasthan	77	47	49	-0.10	0.01
Tamil Nadu	52	48	50	-0.02	0.01
Uttar Pradesh	33	36	31	0.02	-0.03
Uttarakhand	42	42	33	0.00	-0.05
West Bengal	25	26	38	0.01	0.12
Mean	41	41	39	0.00	-0.01
C. V.	33.30	20.37	18.94	_	_

The average persondays varied widely across states as shown in the table 2.1.2.a. In 2007-08, the average persondays varied from 22 persondays to 77 persondays. The highest and lowest average persondays are witnessed in Rajasthan and Bihar respectively. In 2007-08, the states which secured the top five ranks in terms of average persondays were Rajasthan (77), Madhya Pradesh (63), Chhattisgarh (58), Tamil Nadu (52) and Haryana (50). West Bengal and Bihar were managed to provide only 25 persondays and 22 persondays respectively. In 2015-16 the average persondays varied from 26 persondays to 52 persondays. All states changed their position and Maharashtra shifted to the first position with 52 persondays. Haryana (28), Assam (29) and Punjab (26) did not secure 30 persondays in an average.

It is to note that the mean of the average persondays in 20 states remained same over the period. Besides, the variation of average persondays across states over time declined gradually

during 2007 to 2015-16. The coefficient of variation decreased from 33.03 in 2007-08 to 20.37 in 2011-12 and further to 18.94 in 2015-16.

Table 2.1.2.b: Percentage of household receiving at least 100 days of employment among total household provided employment

				Change of % point	
states	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16
Andhra Pradesh	9.00	17.76	9.24	8.76	-8.51
Assam	17.07	1.26	2.33	-15.81	1.07
Bihar	1.37	9.22	4.18	7.85	-5.04
Chhattisgarh	11.21	7.90	6.26	-3.31	-1.63
Gujarat	3.93	5.05	2.50	1.12	-2.55
Haryana	10.44	4.89	2.02	-5.55	-2.87
Himachal Pradesh	5.11	8.87	4.16	3.76	-4.71
Jammu & Kashmir	3.02	6.57	2.06	3.55	-4.51
Jharkhand	2.97	3.67	9.99	0.71	6.31
Karnataka	4.20	2.73	7.17	-1.46	4.44
Kerala	32.06	8.78	3.82	-23.29	-4.96
Madhya Pradesh	21.21	6.96	6.10	-14.25	-0.86
Maharashtra	1.76	11.27	13.46	9.51	2.20
Odisha	3.52	3.46	5.76	-0.06	2.30
Punjab	5.32	1.54	1.19	-3.77	-0.35
Rajasthan	41.98	7.22	7.21	-34.77	0.00
Tamil Nadu	6.24	9.48	5.55	3.24	-3.93
Uttar Pradesh	10.64	4.15	2.24	-6.50	-1.90
Uttarakhand	8.27	4.47	2.25	-3.80	-2.22
West Bengal	0.82	2.01	3.74	1.19	1.73

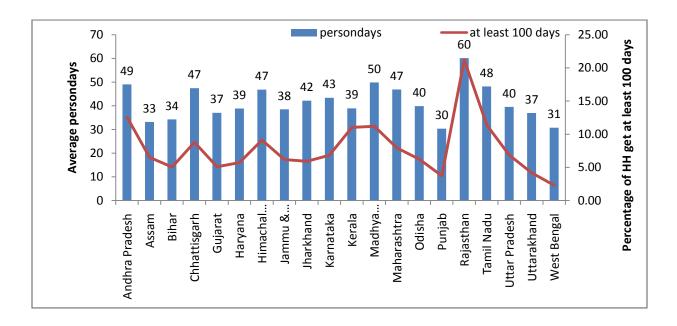
Mean	10.01	6.36	5.06	-3.64	-1.30
C. V.	107.27	62.12	62.90	_	_

The percentage of household provided at least 100 days employment in states varied between 0.82 percent to 41.98 percent in 2007-08 and between 1.19 and 13.46 percent in 2015-16. In 2007-08, among 20 states, the top five states in terms of high percentage of household provided at least 100 days job were Rajasthan (41.98 percent), Kerala (32.06 percent), Madhya Pradesh (21.21 percent), Assam (17.07percent) and Chhattisgarh (11.21 percent). The percentage of household provided at least 100 days job in 2015-16 was highest in Maharashtra (13.46 percent, followed by, Andhra Pradesh (9.24 percent), Rajasthan (7.25 percent), Chhattisgarh (6.26 percent) and Madhya Pradesh (6.1 percent). The percentage was relatively low (less than two percent) in Punjab (1.19 percent).

The percentage of household provided at least 100 days employment decrease over time in majority of states. It increased in Andhra Pradesh, Bihar, Gujarat, Himachal Pradesh, Tamil Nadu and West Bengal during 2007-08 to 2011-12. But during 2011-12 to 2015-16 the percentage decreased most of the states. The decreasing trend of providing at least 100 days job confirms the inability of the programme to give a support to the rural people which were the core objective of the programme.

The mean of the percentage of household provided at least 100 days job in 20 states decreased from 10.01 percent in 2007-08 to 6.36 percent in 2011-12 and further decreased to 5.06 percent in 2015-16. Besides, the variation of percentage of household providing 100 days job across states declined over the period 2007-08 to 2015-16.

Figure 2.1.2: State-wise Average Persondays of Employment per household in an average during 2006-07 to 2015-16



From the figure 2.1.2 we can see that Madhya Pradesh (50) and Rajasthan (60) are able to provide more than 50 day job per household among the major states. The most of the states among major states provide 100 days of job below 10 percent of household to total household provided employment. In several states like Rajasthan (21.2 percent), Madhya Pradesh (11.1 percent), Andhra Pradesh (12.5 percent) in an average (2006-07 to 2015-16) belonged to the category of above 10 percent level. Tamil Nadu (11.3 percent) and Kerala (11 percent) are also able to catch up the 10 percent level. Hence we can say that MGNREGS is unable to provide any support to combat against poverty.

#### 2.1.3 Share of SC & ST as well as Women in MGNREGA Work:

MGNREGA has been framed to give support to the weaker section of the society and in this respect it was said that SCs & STs families would be given a priority. With regards to the

participation of SCs Table A3 given in appendix shows a decreasing trend till 2015-16 since inception from 62 percent to 40.05 percent. These specify that both the SCs & STs are not seeing MGNREGA as a very attractive employment option and are finding better employment options than that. This does not indicate a very positive image of MGNREGA as far as social inclusion of both SCs and STs are concerned. The state wise share of SCs & STs participation is given in Table 2.1.3.a.

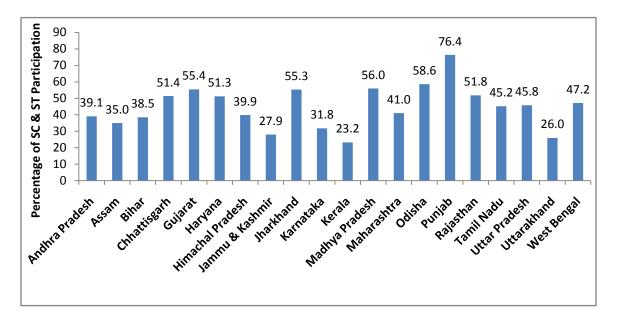
Table 2.1.3.a: Percentage of SCs & STs Participation in Total MGNREGA Job

				Change of % point		
states	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	40.51	45.35	35.42	4.84	-9.93	
Assam	46.72	28.37	23.77	-18.35	-4.6	
Bihar	48.12	26.34	26.20	-21.78	-0.14	
Chhattisgarh	56.3	47.19	51.84	-9.11	4.65	
Gujarat	71.84	48.11	46.63	-23.73	-1.48	
Haryana	53.81	49.7	49.91	-4.11	0.21	
Himachal Pradesh	43.35	36.19	35.52	-7.16	-0.67	
Jammu & Kashmir	34.19	22.34	24.08	-11.85	1.74	
Jharkhand	62.39	51.85	50.63	-10.54	-1.22	
Karnataka	49.41	24.00	25.17	-25.41	1.17	
Kerala	33.77	16.69	21.47	-17.08	4.78	
Madhya Pradesh	66.63	48.58	49.08	-18.05	0.5	
Maharashtra	56.94	22.91	27.28	-34.03	4.37	
Odisha	63.98	55.67	58.33	-8.31	2.66	
Punjab	76.3	77.44	76.88	1.14	-0.56	
Rajasthan	65.63	41.30	46.20	-24.33	4.9	
Tamil Nadu	59.99	30.16	29.66	-29.83	-0.5	

Uttar Pradesh	55.6	32.80	36.09	-22.8	3.29
Uttarakhand	31.65	21.23	22.58	-10.42	1.35
West Bengal	50.08	43.98	42.32	-6.1	-1.66
Mean	53.36	38.51	38.95	-14.85	0.44
C. V.	23.73	39.13	37.69	_	_

The SCs & STs participation has been varied across states in India within 31.65 percent to 71.84 percent in 2007-08 and 23.77 percent to 76.88 percent in 2015-16. The higher ratio indicates the better participation of SCs & STs households. The SCs & STs participation was higher from Gujarat (71.84 percent), Madhya Pradesh (66.63 percent) and Rajasthan (65.63 percent) relative to other states in 2007-08. The percentage was highest in Punjab (76.88 percent), followed by Odisa (58.33 percent) and Chhattisgarh (51.84 percent). The mean decreased from 35.36 percent in 2007-08 to 38.51 percent in 2011-12 and remained same in 2015-16. The increasing CV indicates the increase in variation across states over time.

Figure 2.1.3.a: Average Percentage share of SCs & STs in MGNREGA during 2006-07 to 2015-16



If we consider percentage of SCs & STs participation in total MGNEGS job in an average (2006-07 to 2015-16), in eight states it was higher than the national average (47.4 percent). The states are Punjab (76.4 percent), Madhya Pradesh (56 percent), Odisha (58.6 percent), Gujarat (55.4 percent), Jharkhand (55.3 percent), Rajasthan (51.8 percent) and Chhattisgarh (51.4 percent). The worst performing states in this respect are Kerala (24.4 percent and Uttarakhand (27.8 percent).

MGNREGA considered the essentiality of incorporating gender equity and empowerment of women in its guide line. The objective of MGNREGA is to assure that women have equitable and easy availability work, decent conditions of work, equal wage payment and representation on decision-making bodies. From 2006–07 to 2015–16 around 49 percent of the total persondays generated have been by women. Overall, MGNREGA has been a positive role for women.

The women participation trend in MGNREGA has shown a continuous increase from 40.6 percent in 2006-07 to 55.8 percent in 2015-16, which are positive indication. The positive trend indicates a social inclusion of women. The percentage of women participation in states of India during 2006-07 to 2015-16 as shown in Table and Figure 2.1.3.b reveal that participation in MGNREGA in all states was more or less male dominated.

Table 2.1.3.b: Percentage of Women Participation in Total MGNREGA Job

				Change o	ge of % point	
states	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	57.75	57.79	57.52	0.04	-0.27	
Assam	30.85	24.92	32.91	-5.93	7.99	
Bihar	26.62	28.64	41.01	2.02	12.37	
Chhattisgarh	42.05	45.25	48.64	3.20	3.39	
Gujarat	46.54	45.23	46.36	-1.31	1.13	
Haryana	34.44	36.43	45.17	1.99	8.74	
Himachal Pradesh	30.11	59.51	63.64	29.40	4.13	
Jammu & Kashmir	1.08	17.72	24.33	16.64	6.61	
Jharkhand	27.17	31.28	32.67	4.11	1.39	
Karnataka	50.27	45.93	47.08	-4.34	1.15	
Kerala	71.39	92.85	91.38	21.46	-1.47	
Madhya Pradesh	41.67	42.65	43.15	0.98	0.50	
Maharashtra	39.99	45.98	43.90	5.99	-2.08	
Odisha	36.39	38.65	37.48	2.26	-1.17	
Punjab	16.29	43.24	58.23	26.95	14.99	
Rajasthan	69.00	69.17	69.57	0.17	0.40	
Tamil Nadu	82.01	74.02	84.96	-7.99	10.94	

Uttar Pradesh	14.53	17.13	29.15	2.60	12.02
Uttarakhand	42.77	44.59	49.83	1.82	5.24
West Bengal	16.99	32.44	46.63	15.45	14.19
Mean	38.90	44.67	49.68	5.78	5.01
C. V.	52.32	42.19	34.84	_	_

In 2007-08, the percentage of women participation in states of India varied between 1.08 percent and 82.01 percent. The states occupied the top 5<sup>th</sup> position were Tamil Nadu (82.01 percent), Kerala (71.39), Rajasthan (69 percent), Andhra Pradesh (57.75 percent) and Karnataka (50.27 percent) and the states with less than 20 percent were Jammu & Kashmir (1.08 percent), Punjab (16.29 percent), West Bengal (16.99 percent) and Uttar Pradesh (14.53 percent). The percentage of women participation changed in positive direction in most of the state in 2015- 16 and the change was notable in five states only. Kerala shifted to first position with 91.38 percent of women participation in 2015-16, followed by, Tamil Nadu (84.96 percent), Rajasthan (69.57 percent) and Himachal Pradesh (63.64 percent), while Uttar Pradesh (29.15 percent) and Jammu & Kashmir (24.33 percent) showed low levels of women participation. The reasons for high participation of women in the programme and inter-state variations in participation of women can be identified as cultural and religious acceptance of women participation in the labour force; influence of self-help groups, effective government initiative to promote female participation, wage differential between private sector and MGNREGA and higher rationing in favour of women. Again for women, the mean of percentage participation over the period increased from 38.90 to 44.67 percent from 2007-08 to 2011-12 and further to 49.68 percent in 2015-16. The decreasing CV signifies the decrease in variability across districts over time.

The next figure indicates the scenario of women participation in an average during 2006-07 to 2015-16.

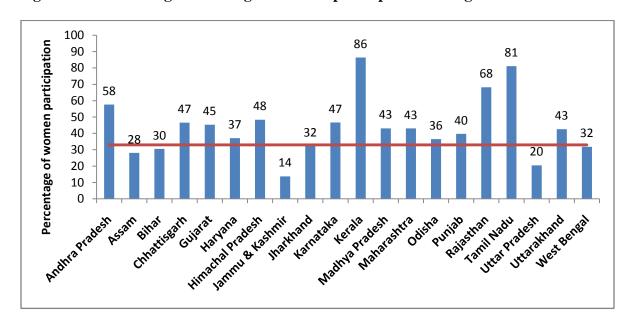


Figure 2.1.3.b: Average Percentage of women participation during 2006-07 to 2015-16

 $Source: Author's \ calculation \ based \ on \ secondary \ data \ , \ www.nrega.nic.in$ 

The states where the share of women in total person days generated disproportionately higher included Kerala (86 percent), Tamil Nadu (81 percent), Rajasthan (68 percent), Andhra Pradesh (58 percent). The states which failed to provide 33 percent employment to women (as mandated by the Act) are Jammu & Kashmir (14 percent), Uttar Pradesh (20 percent), Bihar (30 percent), West Bengal (32 percent), Assam (28 percent) and Jharkhand (32 percent). Among the major states though there was some religion constraint among women. But this was not true for West Bengal, Bihar and Assam. Yet these states were below the programme stipulated 33 percent level which was demarcated by line diagram.

#### 2.2 Utilisation of Fund in MGNREGA in India and her States

#### 2.2.1 Per capita availability of fund and utilization

Creation of sustainable asset to improve the livelihood and reduce the poverty is the key objective of the programme. Expenditure on asset creation can be used as a measure of asset and to study the performance of state in asset creation and we have considered expenditure in percapita sense for different population size and variability of state. The percapita expenditure through MGNREGA in states of India is shown in the Table 2.2.1.a and the percapita and percentage expenditure against total available fund in an average from 2006-07 to 2015-16 as shown in Figure 2.2.1 depicts the actual percapita asset generation in a states and utilization of fund respectively.

**Table 2.2.1.a: Percapita Expenditure through MGNREGA Work (in Rupees)** 

				Annual Growth		
states	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	372	726	567	0.24	-0.05	
Assam	217	279	382	0.07	0.09	
Bihar	124	164	181	0.08	0.03	
Chhattisgarh	763	1044	753	0.09	-0.07	
Gujarat	24	187	102	1.70	-0.11	
Haryana	33	192	90	1.20	-0.13	
Himachal Pradesh	213	816	687	0.71	-0.04	
Jammu & Kashmir	46	427	759	2.07	0.19	
Jharkhand	456	456	452	0.00	0.00	
Karnataka	104	585	389	1.16	-0.08	
Kerala	42	575	968	3.17	0.17	
Madhya Pradesh	589	647	508	0.02	-0.05	
Maharashtra	32	258	253	1.77	-0.01	
Odisha	174	295	515	0.17	0.19	

Punjab	18	92	213	1.03	0.33
Rajasthan	307	618	585	0.25	-0.01
Tamil Nadu	142	775	1246	1.11	0.15
Uttar Pradesh	131	326	196	0.37	-0.10
Uttarakhand	142	565	721	0.74	0.07
West Bengal	166	483	983	0.48	0.26
Mean	205	476	528	0.33	0.03
C. V.	98	53	60	_	_

The percapita expenditure across states of India ranging between Rs. 18 and Rs. 763 in 2007-08 and Rs. 90 to Rs. 1246 in 2015-16. The percapita expenditure was highest in Chhattisgarh (Rs. 763), followed by Madhya Pradesh (Rs. 589), Jharkhand (Rs. 456) and Rajasthan (Rs. 307) in 2007-08. The states lagging behind with the expenditure of below Rs. 100 are Punjab (Rs. 18) followed by Gujarat (Rs. 24), Maharashtra (Rs. 32), Haryana (Rs. 33), Kerala (Rs. 42) and Jammu & Kashmir (Rs. 46) which was very shocking at the initiation of the programme but the states adopted the programme and performed in a better way for the next years. Tamil Nadu secured the first position (Rs. 1246) in 2015-16, followed by West Bengal (Rs. 983) and Kerala (Rs. 968). Gujarat (Rs. 102) and Haryana (Rs. 90) still remained below or just 100 Rs. percapita expenditure level. The average of the percapita expenditure of 20 states increased from Rs. 205 in 2007-08 to Rs. 476 in 2011-12 and further to Rs. 528 in 2015-16. The variation in the percapita expenditure across the states decreased from 98 to 53 in 2007-08 to 2011-12 as shown by the coefficient of variation (CV) of percapita expenditure were remaining fluctuating over the period in a minor scale. The percapita expenditure increased for all states from 2007-08 to 2011-12 and except few states it decreased slightly during 2011-12 to 2015-16.

The fund allocation for MGNREGS has not matched with the expansion of the scheme. While the number of districts covered under MGNREGA has doubled in 2008-09, the allocation of funds has increased only by 20 percent. Since all employment generation schemes have now merged with MGNREGA, this is clearly inadequate. But with respect of fund utilization, MGNREGA has received solemn criticism on account of perceived misappropriations and leakages under the programme. There are a number of field studies that validate the fact that, given the scale of the programme, there are large scale discrepancies at state/district level. So small fund allocation with leakages under MGNREGA may turn into ineffective. The percentage expenditure against total fund available through MGNREGA in states of India is shown in the Table 2.2.1.b.

Table 2.2.1.b: Percentage expenditure against total fund available

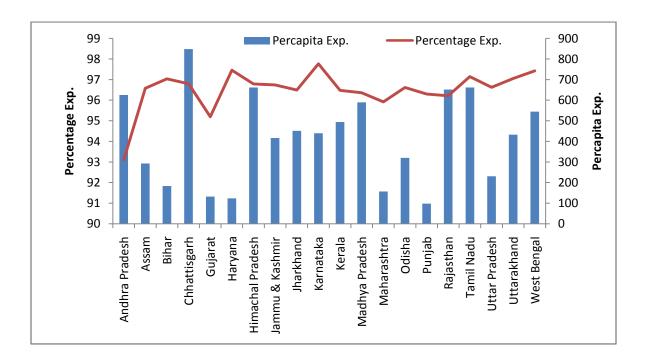
				Change of % point		
tates	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	94	233	112	139	-121	
Assam	71	89	172	18	83	
Bihar	70	63	125	-7	62	
Chhattisgarh	101	82	174	-19	92	
Gujarat	59	78	166	19	88	
Haryana	76	115	120	39	5	
Himachal Pradesh	75	93	117	18	24	
Jammu & Kashmir	45	40	114	-5	74	
Jharkhand	85	67	102	-18	35	
Karnataka	53	167	156	114	-11	
Kerala	81	96	122	15	26	
Madhya Pradesh	89	69	126	-20	57	

Maharashtra	37	110	126	73	16
Odisha	76	75	120	-1	45
Punjab	51	84	150	33	66
Rajasthan	104	77	117	-27	40
Tamil Nadu	88	79	76	-9	-3
Uttar Pradesh	86	79	127	-7	48
Uttarakhand	60	89	114	29	25
West Bengal	78	97	137	19	40
Mean	74	94	129	20	35
C. V.	25	44	19	_	_

The percentage expenditure against total fund available across states varied between 37 to 104 percent in 2007-08 and 76 to 174 percent in 2015-16. In 2007-08, among 20 states, the top five states in terms of high percentage of fund utilisation were Rajasthan (104 percent), Chhattisgarh (101 percent), Andhra Pradesh (94 percent), Madhya Pradesh (89 percent) and Tamil Nadu (88 percent). The utilization of fund in 2015-16 was highest in Chhattisgarh (174 percent), followed by, Assam (172 percent), Gujarat (166 percent), Karnataka (156 percent) and Punjab (150 percent).

The fund utilisation increased over time in majority of states. It decreased in Andhra Pradesh (yet it was higher than fund availability), Karnataka and Tamil Nadu during 2011-12 to 2015-16. The mean of fund utilisation in 20 states increased from 74 percent in 2007-08 to 94 percent in 2011-12 and further to 129 percent in 2015-16. Besides, the variation of the percentage was fluctuating over the period.

Figure 2.2.1: Average Percapita expenditure and percentage expenditure against total fund available during 2006-07 to 2015-16



It is noticed that in the financial year 2008-09, fund utilization against the availability of fund in India was 73 percent and there was a positive trend of better fund utilization. It decreases to 73 percent in the 2012-13 as against 87 percent in 2011-12. It is notable that onwards 2013-14 the percentage of fund utilization is above hundred percent which signify that the expenditure is excess of transfer from central government i.e. the role of state government increases over the showing their faith on the programme. Andhra Pradesh, Karnataka, Madhya Pradesh, Rajasthan and West Bengal make expenditure over available allocation in an average (2006-07 to 2015-16). Some other states like Bihar, Maharashtra, Jharkhand, Jammu & Kashmir and Tamil Nadu were unable to spend its allotted budget.

#### 2.2.2 Distribution of expenditure among Wage, Material and Administrative cost

MGNREGA allow 6 per cent of the total expenditure in a State, as administrative expenditure.

It is observed from the Table A5 in the appendix that over the year the percentage on wage and material expenditure remains more or less same for last five years. For most of the major states percentage expenditure on wage and material in an average (2006-07 to 2015-16) is above 95 percent. But above 6 percent administrative expenditure is treated as inefficiency. So the states above the expenditure of 97 percent in wage and material together are considered as moderately efficient and above the 98 percent are treated as efficient like the states Karnataka.

Distribution of Distribution of % Asexpenditure in 2015-16 expenditure in 2012-13 adminis Adminis tration trative materia % Age Expendi of ture 19% Expendi 4% ture on Materia % Age 22% of wage Expendi 76% ture on Wages 74%

Figure 2.2.2: Distribution of total expenditure among wage, material and administration

Source: Author's calculation based on secondary data, www.nrega.nic.in

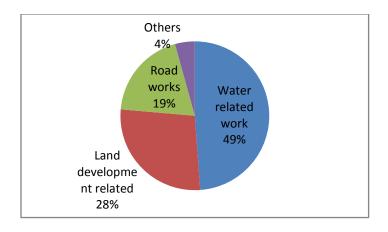
The above figure shows the predominance of share of wage over two period. Not only that it is true for all over the implementation period and this is true across states. From our previous discusion we have known that share of wage and material remains more or less same. But it is positive to us that MGNREGS average wage cost increases continously since the initiation of programme. The average wage cost is given in appendix by table A4. The average wage cost

wage Rs 63.40 in 2006-07, Rs. 74.20 in 2007-08, Rs. 84.30 in 2008-09, Rs. 90.20 in 2009-10 and Rs. 99.88 in 2010-11 for all India level. In the FY 2011-12 and FY 2012-13 the figure augmented to Rs. 117.44 and Rs. 128.49 respectively. The average wage cost is near about triple (Rs. 174) in 2015-16 from its inception. Karnataka (Rs. 215.01) and Haryan (Rs 195.52) secure the first and second position with respect to MGNREGS average wage cost in 2015-16.

#### 2.3 Formation of Productive Asset:

The creation of durable assets to strengthen the livelihood resource base has been one of the Scheme's key objectives, requires identifying a shelf of projects consistent with the range of permissible works. Assets so created are intended to enhance rural livelihoods and will help to create a cleaner and healthier environment for the population. The Ministry of Rural Development has recently expanded the list of works permissible under the Scheme to include activities related to agriculture, livestock, fisheries, drinking water, flood management and irrigation (Table A6 in appendix). This indicates that MGNREGA is moving towards more productive and sustainable rural development works. From the initiation of the programme about 17.24 crore works were completed up to FY 2015-16. Figure 3.7 indicates, that 48.8 percent related to water, with a focus on rain water harvesting and desilting and digging and renovation of ponds, tanks and wells. Another 19.3 percent relate to rural connectivity, but this is no longer emphsised because MGNREGA is not the most appropriate programme for road works. Finally, 12.8 percent relate to land owned by SC/ST/BPL/SMF/IAY and land reform beneficiary households.

Figure 2.3.1: Share of different type of work under MGNREGS FY 2015-16



To assess the effective proramme inplementatin in terms of asset creation, we have considered total works taken up and per centage of work completed over total work taken up due to variablity of size across states. We consider 500000 number of works as constant level of work under taken.

The total work taken up and percentage of work completion over total work taken up for states of India is shown in Table 2.3.1 and Table 2.3.2 respectively. Total work will consider the extent of asset creation where as the percentage of work completion indicates the intensity of performance of true asset creation.

Table 2.3.1: Total work taken up across states

				Change of % point		
States	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	475648	1732646	1203772	1256998	-528874	
Assam	11855	67297	88879	55442	21582	
Bihar	90510	349898	521422	259388	171524	
Chhattisgarh	102355	240142	322082	137787	81940	

Gujarat	21604	138874	136176	117270	-2698
Haryana	2831	20452	13467	17621	-6985
Himachal Pradesh	19262	79594	102093	60332	22499
Jammu & Kashmir	5814	67476	197749	61662	130273
Jharkhand	159057	257614	199069	98557	-58545
Karnataka	39377	354445	1055856	315068	701411
Kerala	15278	158764	374396	143486	215632
Madhya Pradesh	341529	883162	614076	541633	-269086
Maharashtra	13699	255213	422873	241514	167660
Odisha	65120	229398	479599	164278	250201
Punjab	2286	17866	29811	15580	11945
Rajasthan	63238	389394	385796	326156	-3598
Tamil Nadu	18509	138213	534467	119704	396254
Uttar Pradesh	147867	1393606	1384133	1245739	-9473
Uttarakhand	10971	70260	88285	59289	18025
West Bengal	127330	408058	1387339	280728	979281
Mean	86707	362618	477067	275911	114448
C. V.	1.41	1.26	0.92	_	_

The total work taken up varied widely across states. In 2007-08, the total work taken up was highest in Andhra Pradesh (4.7 lakh), followed by Madhya Pradesh (3.4 lakh), Jharkhand (1.5 lakh), Uttar Pradesh (1.4 lakh) and West Bengal (1.2 lakh). It was very low for Punjab (0.02 lakh) and Jammu & Kashmir (.05 lakh). In 2015-16, the work taken was highest in West Bengal (13.87 lakh), followed by Uttar Pradesh (13.84 lakh), Andhra Pradesh (12.03 lakh) and Karnataka (10.55 lakh). The mean of work taken up of 20 states increased from .08 lakh in 2007-08 to 3.6 lakh in 2012-13 and further increased to 4.7 lakh. The CV decreased in 2011-12

and after that it decresed gradually and became 0.92 in 2015-16. So the variability across states decreased over the period.

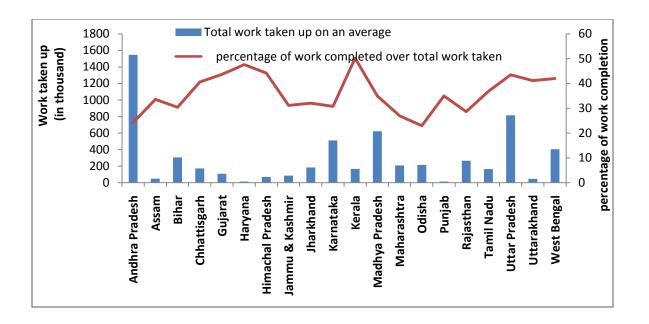
Table 2.3.2: Percentage of work completed over total work taken across states

				Change of % point		
States	2007-08	2011-12	2015-16	2007-08 to 2011-12	2011-12 to 2015-16	
Andhra Pradesh	38.60	2.20	0.65	-36.40	-1.55	
Assam	53.50	17.50	11.38	-36.00	-6.12	
Bihar	51.40	0.20	23.60	-51.20	23.40	
Chhattisgarh	64.10	29.30	7.72	-34.80	-21.58	
Gujarat	67.50	29.10	8.81	-38.40	-20.29	
Haryana	59.80	70.10	41.71	10.30	-28.39	
Himachal Pradesh	38.90	44.80	39.62	5.90	-5.18	
Jammu & Kashmir	45.50	3.80	17.95	-41.70	14.15	
Jharkhand	31.10	17.30	32.10	-13.80	14.80	
Karnataka	68.80	19.60	21.68	-49.20	2.08	
Kerala	82.80	92.40	15.10	9.60	-77.30	
Madhya Pradesh	39.80	14.60	29.75	-25.20	15.15	
Maharashtra	34.90	2.50	16.92	-32.40	14.42	
Odisha	30.50	32.10	17.01	1.60	-15.09	
Punjab	24.80	40.10	21.84	15.30	-18.26	
Rajasthan	28.60	7.80	14.25	-20.80	6.45	
Tamil Nadu	45.10	19.80	35.83	-25.30	16.03	
Uttar Pradesh	69.10	36.30	16.62	-32.80	-19.68	
Uttarakhand	57.50	17.20	20.33	-40.30	3.13	
West Bengal	48.00	40.40	14.88	-7.60	-25.52	
Mean	49.02	26.86	20.39	-22.16	-6.47	

C. V.	32.80	86.72	52.86	_	_	
						İ

In 2007-08, the percentage of work completed over total work taken up in states of India ranging between 24.80 to 82.80 percent. The states occupied the top 5 positions were Kerala (82.80 percent), Uttar Pradesh (69.10 percent), Karnataka (68.80 Percent), Gujarat (67.50 percent) and Chhattisgarh (64.10 percent) though it was very low in Punjab (24.80 percent) and Rajasthan (28.60 percent). The pecentage of work completed ranging between 0.65 and 41.71 percent in 2015-16 across the states in India. In 2015-16, the percentage of work completed was highest in Haryana (41.71 percent), followed by Himachal Pradesh (39.62 percent), Tamil Nadu (35.83 percent), Jharkhand (32.10 percent) and Madhya Pradesh (29.75 percent) and the state with less 10 percent were Andhra Pradesh (0.65 percent), Chhattisgarh (7.72 percent) and Gujarat (8.81 percent). The mean of percentage of work completed over the period decreased from 49.02 percent in 2007-08 to 26.86 percent in 2011-12 and further to 20.39 percent to 2015-16. The increasing CV signifies the increase in variability across districts over time.

Figure 2.3.2: Total work taken up and percentage of work completed during 2006-07 to 2015-16



The figure 2.3.2 consider the total work taken up and percentage of work completed over total work taken up during 2006-07 to 2015-16. It is clear from the figure that if lower work has under taken then there has been a higher percentage of work completion. Andhra Pradesh, Madhya Pradesh, Uttar Pradesh reach the mile stone of 5 lakh of work under taken.

#### 2.4 Overall Performance of MGNREGA

MGNREGA is worldwide recognized initiative seeking to ensure the right to work and safeguard the livelihood protection to disadvantaged households. However, as the programme enters into the 10<sup>th</sup> year of execution certain questions are raised with respect to corruption and fund diversions. We have examined the indicators of MGNREGA in our previous section. Now we have done some t-test of the indicators to justify the significant change of the indicators over the period. On the other hand to analyze the performance across states we have developed a performance index taking the indicators in an average over the period.

Table 2.4.1: Analysis of performance of different attribute over time for India

		2007 -8 to 2011-12		2011-12 to 2015-16	
Sl.		Mean		Mean	
No.	Attribute	Difference	t-test	Difference	t-test
	Percentage of household get job with				
1	issued job card	-10.905	-1.963**	-3.353	-0.655
	Average Persondays of Employment Per				
2	Household	-0.400	-0.112	-1.456	-0.587
	Percentage of household receiving at least				
	100 days of employment among total				
3	household provided employment	-3.644	-1.425*	-1.301	-1.146
	Percentage of women participation in total				
4	MGNREGA job	5.776	0.931	5.010	0.875
	Percentage of SC & ST participation in				
5	total MGNREGA job	-14.851	-3.374***	0.443	0.094
	Percentage expenditure against total fund				
6	available	-20.150	1.998**	34.501	3.227***
	Percapita expenditure ( per capita asset				
7	creation)	270.750	3.737***	52.021	0.573
	Percentage of work completed over total				
8	work taken	-22.160	-3.502***	-6.468	-1.127
9	MGNREGA average wage cost (Rs.)	48.977	7.106***	68.217	5.787***

The above table 2.4.1 represents t statistics and mean differences of different indicators on MGNREGA. The core objective of the programme was to provide employment to the rural households to provide supplementary income when there is scarcity of job to the rural mass. So, average persondays is a prime indicator of direct benefit received by the household. The mean differences of average persondays were -0.4 and -1.45 in 2007-08 to 2011-12 and 2011-12 to

2015-16 respectively. The negative mean difference was statistically insignificant and implies that there was no significant change in average persondays from 2007-08 to 2011-12 and 2011-12 to 2015-16 respectively. Percentage of households receiving at least 100 days employment among total households provided employment decreased signigicantly by 3.64 percent from 2007-08 to 2011-12 and after that it remains more or less same. So after 2011-12 the direct benefits or employment opportunities did not extent. The change of women participation is not statistically significant. So, we can say women participation is more or less remaining same. On the other hand participation of SC/ST households decreased over time. The percentage expenditure over total fund available first deceased and then increased. Percapita expenditure also increased gradually from the initiation of the programme and at end it remains same in statistical sense. But the percentage of work completed decreased by 22.16 percent from 2007-08 to 2011-12. So there was a wide gap between actual asset creation and fund realisation. Average wage cost increased over the period.

To make the performance index (PI) using the Fuzzy Set Theory (Zadah, 1965), we have taken 14 indicators across 20 states of India. The indicators of PI are work availability per households, sex wise and cast wise participation in MGNREGS, percentage of household get at least 100 days of job in total household employed in MGNREGS, per capita fund expenditure, utilization of available fund and success of completeness of work. Most of the indicators are in percentage term. We take the percentage in an average for 2006-07 to 2015-16 for each indicator separately. We construct a weight set using the formula proposed in the methodology of performance index.

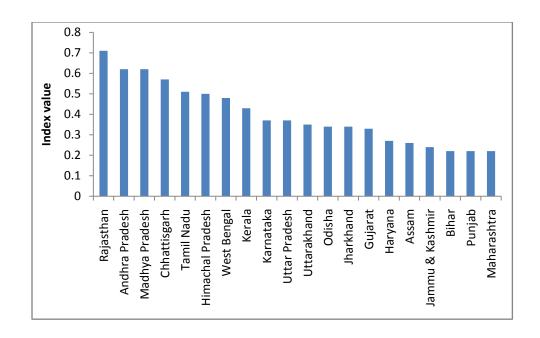
Table 2.4.2: Indicators taken to calculate TFA

Indicators	Sub-Indicators Sub-Indicators	maximum	minimum
Employment	Proportion of Households Having MGNREGS job card (ALL)	91.2	6.6

Generation	Proportion of Households Having MGNREGS job card (SC)	98.1	0
	Proportion of Households Having MGNREGS job card (ST)	91.3	0
	Percentage of household get job with issued job card	113.45	11.23
	Average person days per household	81.65	9.2
	Percentage of household receiving at least 100 days of employment		
	under MGNREGS	27.78	0.26
	Percentage of SC & ST participation in total MGNREGS job	99.9	15.4
	Percentage of women participation in total MGNREGS job	84	9
Utilisation of	Percentage expenditure against total fund available	123.77	23.81
Fund	Percapita expenditure	3285.27	64.05
	Percentage expenditure on wage & material	98	82
	Average wage cost	79.46	148.04
Productive	Total works taken up	1631679	16
Asset			
Creation	Percentage of work completed over total work taken	71.2	14.8

Source: Author's calculation based on secondary data

Figure 2.4.1 Rank of states as per their performance in an average over the period 2006-07 to 2015-16



Source: Author's calculation based on secondary data

The overall performance calculated given in the appendix (table A 7) is not so good. Only five states are above the average level of performance. The level of performance of Rajasthan is very good securing the first place with index value 0.71. It is obvious Andhra Pradesh is good performing state and very close to very good performing region. West Bengal is relatively good performing state than Uttar Pradesh, Gujarat, Bihar, Karnataka, Jharkhand and Odisha. Jammu & Kashmir fall into the very low performing state.

## 2.5 Summing up

The entitlement of households increased and employment of households decreased over time in most of the states. The percentage of household provided at least 100 days employment decreased in majority of states during 2011-12 to 2015-16. The participation of SCs/STs decreased from inception to 2015-16 signifies that MGNREGA is no more attractive employment option. The women participation in MGNREGA has shown a continuous increase

which is a positive indication and indicates a social inclusion of women. Jammu & Kashmir, Uttar Pradesh, Bihar, West Bengal, Assam and Jharkhand were not able to provide 33 percent women employment under MGNREGA. The percapita expenditure have increased more or less for all states from 2007-08 to 2011-12 and again in few states it decreased slightly during 2011-12 to 2015-16. The fund utilisation increased over time in majority of states. MGNREGA average wage cost increased continously since the initiation of programme. The average wage cost was near about triple (Rs. 174) in 2015-16 from its inception. Finally MGNREGA is moving towards more productive and sustainable rural development works. 48.8 percent related to water, with a focus on rain water harvesting and desilting and digging and renovation of ponds, tanks and wells. The pecentage of work completed varied between 0.65 to 41.71 percent in 2015-16 across states in India. The overall performance was not so good. Only five states were above the average level of performance and West Bengal has achieved the 7<sup>th</sup> position in this respect. So we can say that the performance of MGNREGA becomes partly effective in terms of previous employment generation programme in India.